

CLAIMS

What is claimed is:

- 1 1. A method of facilitating transmission of a message from a sender to a receiver,
2 comprising:
3 storing sender identification information in association with a penalty that a sender is
4 willing to incur for a first message that is unwanted by the receiver;
5 receiving a query about whether a sender of a first message satisfies specified sending
6 criteria;
7 determining whether the sender satisfies the specified sending criteria; and
8 sending a second message specifying whether the sender of the first message satisfies
9 the specified sending criteria, for use by the receiver in determining whether
10 to accept the first message.
- 1 2. A method as recited in Claim 1, wherein the determining step comprises determining
2 whether the penalty is greater than a base penalty amount multiplied by the sum of (a) a
3 number of complaints about unsolicited messages that are actually received from the sender
4 and (b) an estimate of a number of complaints that are not yet made or never made by the
5 receiver and any other receiver.
- 1 3. A method as recited in Claim 2, further comprising refusing to accept the first
2 message when the penalty is not greater than the base penalty amount multiplied by the sum
3 of (a) and (b).
- 1 4. A method as recited in Claim 1, wherein the determining step comprises determining
2 a sender experience value for the sender of the first message, wherein the sender experience
3 value is computed as the penalty divided by a sum of a number of complaints about
4 unwanted messages that are actually received from the sender and an estimate of a number of
5 complaints that are not yet filed or never filed by the receiver and any other receivers.

1 5. A method as recited in Claim 4, further comprising refusing to accept the first
2 message when the sender experience value for the sender of the first message is less than a
3 specified minimum sender experience value.

1 6. A method of authorizing transmission of a first message from a sender to a receiver,
2 comprising:
3 storing sender identification information in association with a penalty value
4 identifying an amount of monetary value that a sender is willing to pay for a
5 specified message that is sent by the sender to the receiver and that is
6 unwanted by the receiver;
7 receiving a query about whether a first message from the sender is subject to a
8 penalty offered by the sender;
9 determining whether the first message is subject to a penalty offered by the sender;
10 and
11 sending a second message specifying whether the first message is subject to a penalty
12 offered by the sender.

1 7. A method as recited in Claim 6, further comprising the step of receiving a third
2 message indicating that the first message is unwanted.

1 8. A message as recited in Claim 7, further comprising verifying that the third message
2 is legitimate based on comparing a source network address of the third message to a recipient
3 address in the first message.

1 9. A method as recited in Claim 6, further comprising the steps of:
2 receiving a third message, from the receiver, indicating that the first message is
3 unwanted;
4 in response to receiving the third message, transferring money from the sender's
5 account.

1 10. A method as recited in Claim 6, further comprising the steps of receiving a third
2 message, from the receiver, indicating that the first message is unwanted; and in response to
3 receiving the third message, determining a sender experience value for the sender of the first
4 message, wherein the sender experience value is computed as the amount of monetary value
5 divided by a sum of a number of complaints about unwanted messages that are actually
6 received from the sender and an estimate of a number of complaints that are not yet filed or
7 never filed by the receiver and any other receivers.

1 11. A method as recited in Claim 6, further comprising the steps of:
2 receiving a third message, from the receiver, indicating that the first message is
3 unwanted;
4 in response to receiving the third message, transferring value from the sender,
5 wherein the value transferred from the sender is equal to the penalty value.

1 12. A method as recited in Claim 6, further comprising the steps of:
2 after sending the second message, receiving a request to reserve an amount of
3 monetary value equal to the penalty value;
4 in response to receiving the reservation request, storing a reserved penalty value in
5 association with the sender identification data;
6 receiving a third message, from the receiver, indicating that the first message is
7 unwanted;
8 in response to receiving the third message, transferring value from the sender .

1 13. A method as recited in Claim 6, further comprising the steps of:
2 sending the penalty value as part of the second message;
3 receiving a third message, from the receiver, indicating that the first message is
4 unwanted;
5 in response to receiving the third message, transferring value from the sender.

1 14. A method as recited in Claim 6, wherein the first message is an electronic mail
2 message.

1 15. A method as recited in Claim 6, wherein the first message is a telephone message.

1 16. A method as recited in Claim 6, wherein the first message is an electronic mail
2 message, and wherein the query is received from an electronic mail service provider.

1 17. A method as recited in Claim 6, wherein the first message is a telephone message,
2 and wherein the query is received from a telephone network service provider.

1 18. A method as recited in Claim 6, wherein the storing step comprises the step of storing
2 sender identification information with multiple penalty values identifying a plurality of
3 different amounts of monetary value that a sender is willing to pay for a message that is sent
4 by the sender to receivers and that is unwanted by the receivers, wherein each of the plurality
5 of penalty values is associated with one of a plurality of receivers.

1 19. A method as recited in Claim 6, wherein the storing step comprises the step of storing
2 sender identification information in association with a plurality of penalty values identifying
3 a plurality of different amounts of monetary value that a sender is willing to pay for a
4 message that is sent by the sender to receivers and that is unwanted by the receivers, wherein
5 each of the plurality of penalty values is associated with one of a plurality of categories of
6 receivers.

1 20. A method as recited in Claim 6, wherein the storing step comprises the step of storing
2 sender identification information in association with a plurality of penalty values identifying
3 a plurality of different amounts of monetary value that a sender is willing to pay for a
4 message that is sent by the sender to a receiver and that is unwanted by the receiver, wherein
5 each of the plurality of penalty values is associated with one of a plurality of categories of
6 messages.

1 21. A method as recited in Claim 6, wherein the storing step comprises the step of storing
2 sender identification information in association with a penalty value identifying a maximum
3 amount of monetary value that a sender is willing to pay for a message that is sent by the
4 sender to a receiver and that is unwanted by the receiver, and further comprising the steps of:
5 receiving a third message, from the receiver, indicating that the first message is
6 unwanted;
7 in response to receiving the third message, selecting a value amount that is less than
8 or equal to the penalty value, and transferring the selected value amount from
9 the sender.

1 22. A method as recited in Claim 6, further comprising the steps of:
2 receiving a third message, from the receiver, indicating that the first message is
3 unwanted;
4 in response to receiving the third message, transferring value from the sender,
5 including transferring a portion of the value to the recipient.

1 23. A method for sending a bonded message to a recipient, comprising:
2 agreeing, with a service operator, to pay a penalty if a recipient receives an unwanted
3 bonded message;
4 sending a bonded message to the recipient; and
5 paying a penalty if the recipient in response to the recipient indicating that the bonded
6 message is unwanted.

1 24. A method for processing an electronic message, comprising:
2 receiving a first message from a sender that is sent to an intended recipient;
3 requesting a service operator to determine whether the first message is bonded;
4 receiving a second message from the service operator indicating whether the first
5 message is bonded; and
6 forwarding the first message to the intended recipient only when the second message
7 indicates that the first message is bonded.

1 25. A method for processing an electronic message, comprising:
2 receiving a first message from a sender that is sent to an intended recipient;
3 requesting a service operator to determine whether the sender of the first message
4 satisfies specified sending criteria;
5 receiving a second message from the service operator indicating whether the sender
6 satisfies the specified sending criteria;
7 forwarding the first message to the intended recipient only when the second message
8 indicates that the sender of the first message satisfies the specified sending
9 criteria.

1 26. A method as recited in Claim 25, wherein the second message indicates whether, for
2 the sender, an amount of monetary value that the sender has agreed to forfeit is greater than a
3 penalty that is computed as a base penalty amount multiplied by the sum of (a) a number of
4 complaints about unwanted messages that are actually received from the sender and (b) an
5 estimate of a number of complaints that are not yet made or never made by the receiver and
6 any other receiver.

1 27. A method as recited in Claim 26, further comprising forwarding the first message
2 only when the amount of monetary value is greater than the penalty.

1 28. A method as recited in Claim 25, wherein the second message includes a sender
2 experience value for the sender of the first message, wherein the sender experience value is
3 computed as the amount of monetary value divided by a sum of a number of complaints
4 about unwanted messages that are actually received from the sender and an estimate of a
5 number of complaints that are not yet filed or never filed by the receiver and any other
6 receivers.

1 29. A method as recited in Claim 28, further comprising forwarding the first message
2 only when the sender experience value for the sender of the first message is greater than or
3 equal to a specified minimum sender experience value.

1 30. A method as recited in Claim 25, wherein the second message includes a penalty
2 value identifying a monetary penalty that the sender is willing to pay if the recipient indicates
3 that the first message is unwanted.

1 31. A method as recited in Claim 25, wherein the second message includes a penalty
2 value identifying a monetary penalty that the sender is willing to pay if the recipient indicates
3 that the first message is unwanted, and wherein the requesting step includes requesting the
4 service operator to determine whether the first message is bonded by comparing the penalty
5 value to a specified threshold.

1 32. A method as recited in Claim 25, wherein the second message includes a penalty
2 value identifying a monetary penalty that the sender is willing to pay if the recipient indicates
3 that the first message is unwanted, and wherein the requesting step includes requesting the
4 service operator to determine whether the first message is bonded by comparing the penalty
5 value to a specified threshold, and wherein the specified threshold is selected based on an
6 identity of the intended recipient.

1 33. A method managing electronic messages sent from a sender to a recipient,
2 comprising:
3 receiving agreement from a message sender to pay a penalty , wherein the penalty is
4 based upon a determination that one or more electronic messages sent by the
5 message sender to message recipients are unwanted by the message recipients;
6 receiving one or more indications that a message sent by the message sender is
7 unwanted by one or more of the message recipients;
8 creating and storing one or more records of the indications; and
9 charging the message sender a penalty based upon the number of indications that are
10 received.

1 34. A method as recited in Claim 33, further comprising the steps of informing the
2 recipient whether, for the sender, an amount of monetary value that the sender has agreed to
3 forfeit is greater than a base penalty amount multiplied by the sum of (a) a number of
4 complaints about unwanted messages that are actually received from the sender and (b) an
5 estimate of a number of complaints that are not yet made or never made by the receiver and
6 any other receiver.

1 35. A method as recited in Claim 33, further comprising informing the recipient of a a
2 sender experience value for the sender of the first message, wherein the sender experience
3 value is computed as the amount of monetary value divided by a sum of a number of
4 complaints about unwanted messages that are actually received from the sender and an
5 estimate of a number of complaints that are not yet filed or never filed by the receiver and
6 any other receivers.

1 36. A method as recited in Claim 33, wherein the electronic messages are e-mail
2 messages.

1 37. A method as recited in Claim 33, wherein the electronic messages are telephone calls.

1 38. A method as recited in Claim 33, wherein the electronic messages are pager
2 messages.

1 39. A method as recited in Claim 33, wherein the penalty is determined by multiplying
2 the number of indications by a specified fine amount.

1 40. A method as recited in Claim 33, wherein the penalty is limited to a specified
2 maximum penalty amount for all indications that are received in a specified period.

1 41. A method as recited in Claim 33, wherein the penalty is determined by multiplying
2 the number of indications received by a penalty value that is selected from among one of a
3 plurality of penalty values based on the number of indications that are received.

1 42. A method as recited in Claim 33, wherein the penalty is a fixed amount per indication
2 that exceeds an allowed complaint rate.

1 43. A method of penalizing a sender of unsolicited messages directed to a recipient,
2 comprising the steps of:
3 receiving information specifying that the sender has deposited monetary value in an
4 account associated with information identifying the sender;
5 receiving, from the recipient, information identifying an allegedly wanted message
6 dispatched from the sender to the recipient;
7 determining that the allegedly unsolicited electronic message was unwanted; and
8 penalizing the sender by conveying some or all of the monetary value from the
9 account to a service operator, a receiver, or the recipient in response to
10 determining that the allegedly unsolicited electronic message was unsolicited.

1 44. A method of operating an electronic message gateway, comprising the steps of:
2 receiving an electronic message from a sender;

3 determining whether the sender is identified in a list of known senders;
4 determining whether the message is a mass unsolicited electronic message; and
5 issuing one or more instructions to convey some or all of monetary value, held in an
6 account associated with the sender, from an account associated with the
7 sender to a service operator, a receiver, or the recipient of the electronic
8 message, in response to determining that the electronic message is a mass
9 unsolicited electronic message.

1 45. A method of operating an electronic messaging system, comprising the steps of:
2 receiving information specifying that the sender has deposited monetary value in an
3 account associated with information identifying the sender;
4 receiving an electronic message from a sender;
5 determining whether the sender is identified in a list of known senders;
6 determining whether the message is an unwanted message; and
7 conveying some or all of the monetary value, from the account associated with the
8 sender, to service operator, a receiver, or the recipient of the electronic in
9 response to determining that the electronic message is an unwanted electronic
10 message.

1 46. A method as recited in Claim 45, further comprising the steps of:
2 receiving, from the recipient, directly or indirectly, information identifying an
3 allegedly unsolicited message dispatched from the sender to the recipient; and
4 conveying some or all of the monetary value from the account to service operator, a
5 receiver, or the recipient in response to determining that the allegedly
6 unsolicited electronic message was unwanted , based on the information
7 received from the recipient.

1 47. A method of penalizing a sender of unsolicited messages directed through a receiver
2 to a recipient, comprising the steps of:
3 receiving an encrypted token that the sender provided in the message;

4 determining, based on values in the encrypted token, whether the sender actually
5 created the token;
6 determining whether the sender has sufficient credit to suffer a penalty if the message
7 is unwanted by the recipient;
8 sending a response message identifying whether the sender actually created the token
9 and whether the sender has sufficient credit;
10 receiving information specifying that the message is unwanted; and
11 penalizing the sender.

1 48. A method as recited in Claim 47, further comprising determining whether a recipient
2 address value in the encrypted token matches a known network address of the recipient.

1 49. A method as recited in Claim 47, wherein the encrypted token includes a sender
2 identifier, token identifier, and penalty amount offered by the sender.

1 50. A method as recited in Claim 47, wherein the encrypted token includes a sender
2 identifier, token identifier, penalty amount offered by the sender, and expiration time value.

1 51. A method as recited in Claim 47, wherein values in the encrypted token comprise a
2 sender identifier, penalty amount offered by the sender, and recipient address.

1 52. A method as recited in Claim 47, further comprising the steps of determining whether
2 the encrypted token has been processed before, and generating a value in the response
3 message that indicates whether the encrypted token has been processed before.

1 53. A method as recited in Claim 47, wherein values in the encrypted token comprise an
2 expiration time value, and further comprising the steps of:
3 determining whether the expiration time value has passed;
4 accepting the message only when the expiration time value has not passed.

1 54. A method as recited in Claim 47, wherein values in the encrypted token comprise an
2 penalty amount offered by the sender, and further comprising the steps of:
3 determining whether the penalty amount offered by the sender is greater than a
4 specified minimum penalty value;
5 accepting the message only when the penalty amount offered by the sender is greater
6 than a specified minimum penalty value.

1 55. A method as recited in Claim 47, wherein values in the encrypted token comprise a
2 recipient address value, and further comprising the steps of:
3 determining whether the recipient address value matches a destination address value
4 in a header of the message;
5 accepting the message only when the recipient address value matches a destination
6 address value in a header of the message.

1 56. A method as recited in Claim 47, further comprising the steps of accepting the
2 message only when the sender actually created the token.

1 57. A method as recited in Claim 47, further comprising the steps of penalizing the
2 sender only when a complaint message containing the token is determined to have actually
3 originated from a recipient of the first message.

1 58. A method as recited in Claim 47, further comprising the steps of accepting the
2 message only when the sender has sufficient credit to suffer a penalty if the message is
3 unwanted by the recipient.

1 59. A method as recited in Claim 47, further comprising the steps of:
2 receiving the encrypted token with the information specifying that the message is
3 unwanted; and

4 penalizing the sender only upon determining, based on a sender identifier in the
5 token, that the sender actually created the token.

1 60. A method as recited in Claim 47, further comprising the steps of:
2 receiving the encrypted token with the information specifying that the message is
3 unwanted; and
4 penalizing the sender only upon determining, based on an expiration time value in the
5 token, that the token is unexpired.

1 61. A method as recited in Claim 47, further comprising the steps of:
2 receiving the encrypted token with the information specifying that the message is
3 unwanted; and
4 penalizing the sender only upon determining, based on the token, that the sender has
5 not previously paid a penalty for other messages associated with the same
6 token.

1 62. A method as recited in Claim 47, further comprising the steps of penalizing the
2 sender only upon determining, based on a recipient address in the token, that the submitter of
3 the information specifying that the message is unwanted actually owns or is associated with
4 the recipient address.

1 63. A method as recited in Claim 47, wherein penalizing the sender comprises a service
2 operator issuing an invoice to the sender for payment of a fine.

1 64. A method as recited in Claim 47, wherein penalizing the sender comprises a service
2 operator transferring funds previously provided by the sender from a first account associated
3 with the service operator to a second account associated with the receiver, the recipient, or a
4 beneficiary.

1 65. A computer-readable medium carrying one or more sequences of instructions for
2 delivering electronic messages, which instructions, when executed by one or more
3 processors, cause the one or more processors to carry out the steps of any of Claims 1, 6, 24,
4 25, 33, 42, 43, 44, 45, or 47.

1 66. An apparatus for creating and storing troubleshooting information for delivering
2 electronic messages, comprising means for performing any of the functions recited in Claims
3 1, 6, 24, 25, 33, 42, 43, 44, 45, or 47.

1 67. An apparatus for delivering electronic messages, comprising:
2 a network interface that is coupled to the data network for receiving one or more packet
3 flows therefrom;
4 a processor;
5 one or more stored sequences of instructions which, when executed by the processor, cause
6 the processor to carry out the steps of any of Claims 1, 6, 24, 25, 33, 42, 43, 44, 45 or
7 47.

1 68. A method as recited in Claim 1, wherein the penalty comprises money, resources,
2 goods, services, or promises.

1 69. A method as recited in Claim 6, further comprising the steps of:
2 receiving a third message, from the receiver, indicating that the first message is
3 unwanted;
4 determining whether the third message exceeds an allowed complaint rate associated
5 with the sender; and
6 debiting value from the sender when the complaint rate is exceeded.